

SECTOR 3

COASTS OF ISRAEL, LEBANON, AND SYRIA

Plan.—This sector describes the W coasts of Israel, Lebanon, and Syria. The general descriptive sequence is NNE from Tall Rafah to Ras al Basit.

General Remarks

3.1 Regulations.—Special regulations are in effect for vessels bound for ports in Israel, Lebanon, and Syria. See Pub. 140, Sailing Directions (Planning Guide) North Atlantic Ocean, Baltic Sea, North Sea, and the Mediterranean Sea for details.

Caution.—Prohibited areas, which are permanently closed to navigation, extend seaward from the W coast of Israel and may best be seen on the chart. For details, see Pub. 140, Sailing Directions (Planning Guide) North Atlantic Ocean, Baltic Sea, North Sea, and ~~the Mediterranean Sea.~~

Winds—Weather.—Off the coast of Lebanon the prevailing winds are S or W in the winter and W or SW in the summer. The sea breeze, which in the summer is extremely effective in lowering the air temperature, usually starts about 1000, but can start as early as 0600. Wind velocities increase until the afternoon, then diminish to near calm after sunset. The land breeze, which usually begins about 2000 and lasts until sunrise, is generally weaker than the sea breeze. Gales occur more frequently in winter along the coast.

Visibility on the Lebanese coast is generally good, although haze is common in summer and early morning fog is sometimes experienced. In winter, the visibility is principally restricted by rainfall.

Off the Syrian coast, prevailing winds are predominantly W to SW, with the direction being more variable in the winter than in summer. Land and sea breezes are prominent, especially in July and August. The sea breeze ordinarily sets in during the forenoon, after a period of morning calm. It increases until about noon, then dissipates and becomes calm around sunset.

In general, visibility along the Syrian coast is good, with some local fog and haze at times.

Tides—Currents.—The general easterly current on the N coast of Africa turns NE and N on the coasts of Israel, Lebanon, and Syria, where it becomes weak and variable and affected by the winds; the velocity of the N current occasionally exceeds 1 knot during strong W winds. The N current seems to be slightly influenced by the outflow of the Nile River, and tends to be stronger in August and September when this outflow is at its maximum.

The approach of the tidal progression in the Mediterranean indicates that the flood currents probably set E and the ebb currents probably set W. The small tidal range indicates that these currents are weak and easily influenced by the winds. The flood current is probably accelerated by W winds and retarded by E winds. The reverse is probably true of the ebb current.

Tall Rafah to Ashdod

3.2 Tall Rafah (31°19'N., 34°13'E.) is situated in the vicinity of the border between Egypt and Israel (Gaza Strip). The coast here has vegetation, in the form of scattered trees and small groves, but for the most part undulating sand hills predominate. In clear weather, the mountain ranges inland are visible for a considerable distance offshore.

A line of cliffs, up to 21m high, is located 7 miles NE of Tall Rafah and extends for about 5 miles along the coast. Khan Yunis, a village, stands 4.5 miles ENE of Tall Rafah. It is visible from seaward, but may be difficult to distinguish because the houses tend to blend into the sandy foreground.

Ghazzah (Gaza) (31°30'N., 34°28'E.), a large town, is situated 2 miles inland and separated from the coast by hills of drifting sand, 31 to 46m high. Two minarets stand in the town and are occasionally visible from seaward between the sand hills. A conspicuous tomb is situated on a hill 1 mile SE of the town. This hill, having a flat-topped appearance, rises considerably higher than those surrounding it. The town is reported to be fronted by a pier which is protected by a breakwater.

The current off this part of the coast is normally weak and variable, but during and after W gales in the spring, a N set is experienced of up to 0.5 knot.

Ashqelon (31°40'N., 34°33'E.), an offshore oil terminal, lies 8 miles NE of Ghazzah. It is situated at the outlet of the Elat-Ashqelon overland pipeline.

Tides—Currents.—The current off Ashkelon is usually weak, but during and after W gales in the spring, a N set at about 0.5 knot has been observed.

Depths—Limitations.—A recommended approach route channel, 4 miles wide, leads to the oil terminal and may best be seen on the chart. The terminal consists of four offshore berths which are connected to the shore by submarine pipelines.

Berths Nos. 1 and 2 consist of multi-buoy berths lying in depths of 20m and 16m, respectively. They can accommodate vessels up to 80,000 dwt.

Berths Nos. 3 and 4 consist of SBM (Mono-Buoy) berths lying in depths of 30m. They can accommodate VLCCs up to 250,000 dwt.

Aspect.—The town is situated 2 miles N of the terminal and can be easily identified from seaward by the numerous groves of fruit trees in its vicinity. These groves contrast with the arid wastes to the N and S of the town. Little remains of the ancient town except the huge ramparts which stand on the S and SE sides and enclose a mass of ruins. El Jora, a small modern village, stands close NE of the old town. En Nabi Hsein, a conspicuous white tomb, stands amongst trees on the summit of some rising ground, 0.7 mile ESE of the town.

A prominent tank farm is situated at the oil terminal. A main light is shown from a structure standing near this tank farm.

Pilotage.—Pilotage is compulsory. Pilots can be contacted by VHF and are provided from Ashdod. They usually board at the anchorages. Vessels should send an ETA 72, 48, 24, and 12 hours in advance via Haifa Radio. See General Remarks at the beginning of this sector.

Anchorage.—Anchorage may be obtained in a depth of 18m about 1 mile offshore anywhere along this coast, but clear of the prohibited areas. The bottom is sand, which changes to mud about 1.5 miles offshore, and the holding is good.

Caution.—A prohibited area, which may best be seen on the chart, lies in the vicinity of the offshore berths. Vessels must receive permission before entering this area.

Ashdod (31°49'N., 34°39'E.)

World Port Index No. 45100

3.3 The port of Ashdod lies close N of the mouth of the Lakhish River. It consists of an offshore oil terminal and a harbor which is protected by breakwaters.

Tides—Currents.—The tides are almost negligible, but winds from the W and SW may raise the water level by as much as 0.6m. Winds from the E may lower it by the same amount. After strong W winds prevail, a current sets N at 1 to 1.5 knots and may cause anchored vessels to roll heavily.

Depths—Limitations.—A recommended approach route channel, 4 miles wide, leads ESE for 45 miles to the port and may best be seen on the chart. The harbor entrance should be approached from the NW, keeping clear of the offshore berths.

The main facilities include a bulk quay, 250m long, with a depth of 12.5m alongside; a container quay, 450m long, with a depth of 11m alongside; and a multi-purpose quay, 380m long, with a depth of 13m alongside. In addition, there is 2,140m of total berthage with depths of 6.4 to 10.4m alongside. There are facilities for general cargo, bulk, passenger, container, and ro-ro vessels. Vessels up to 12m draft can be accommodated.

Two offshore tanker berths, consisting of several mooring buoys, lie in depths of 16m, 1.3 miles NE of the harbor entrance. They are marked by lighted buoys and are connected to the shore by submarine pipelines.

Aspect.—A main light is shown from a prominent structure, 42m high, standing at the S end of the port.

A group of five prominent chimneys and a conspicuous radio mast stand 1.5 miles NE of the light. Two lighted buoys mark the harbor entrance fairway.

A lighted buoy is reported to be moored about 4.5 miles NW of the head of the main breakwater.

Pilotage.—Pilotage is compulsory. Pilots can be contacted by VHF and generally board about 0.5 mile NW of the main breakwater. Vessels should send an ETA at least 12 hours in advance. See General Remarks at the beginning of this sector.

Pilots for Ashkelon oil terminal are also provided at this station.

Anchorage.—Exposed anchorage can be taken in depths of 24 to 29m, about 0.8 mile W of the main breakwater and clear of the prohibited area. Limited anchorage can be taken within the breakwaters in a depth of 11m, sand.

Caution.—An anchoring and fishing prohibited area, which may best be seen on the chart, lies in the vicinity of the harbor entrance and the offshore oil berths.

It is reported (1994) that development and construction are being carried out within the harbor.

Ashdod to Haifa

3.4 Nahal Soreq (31°56'N., 34°42'E.) flows into the sea 7.5 miles NNE of Ashdod. A minaret stands on the S bank of this river 1.5 miles within its mouth. It is prominent from the NW but is mostly obscured by sand hills. The coast in this vicinity is generally low and consists of cultivated fields and pasture land. A mountain range stands 25 miles inland and has numerous villages situated along its slopes.

Caution.—Navigation prohibited areas front this stretch of the coast and may best be seen on the chart.

A marine farm, marked by a lighted buoy, is reported (1994) to lie about 7.5 miles NW of the mouth of Nahal Soreq.

Tel Aviv Yafo (32°04'N., 34°46'E.) consists of Tel Aviv and Yafo (Jaffa), which have expanded to form a single town.

Two offshore tanker berths, consisting of several mooring buoys, lie off the N end of the town and are connected to the shore by submarine pipeline. The N end of the town is fronted by a lighter basin and a marina. The S end of the town is fronted by an extensive small craft and yacht harbor.

Roadsteads lying adjacent to both N and S ends of the town provide ample anchorage in depths of 12 to 18m.

Since the port of Ashdod opened, the port of Tel Aviv Yafo has been closed to commercial shipping.

Caution.—An anchoring and fishing prohibited area, which may best be seen on the chart, fronts the central part of the town and extends up to 10 miles seaward.

A navigation prohibited area, which may best be seen on the chart, is situated close N of the N end of the town. It lies adjacent to the airport and extends up to 0.7 mile offshore.

Hadera (32°28'N., 34°53'E.)

World Port Index No. 45085

3.5 Hadera, a terminal serving a power station, consists of an offshore oil berth and a coal discharging jetty.

Depths—Limitations.—A jetty, 2,000m long, extends from the shore and has a coal discharging berth at its head. The berth, with several mooring dolphins, is 300m long and has a depth of 20.5m alongside. Vessels up to 200,000 dwt, 310m in length, and 18.5m draft can be handled.

The offshore oil berth consists of several mooring buoys and is connected to the shore by a submarine pipeline. It lies in a depth of 18m and can handle vessels up to 70,000 dwt.

Aspect.—Two conspicuous chimneys, 254m high, stand adjacent to the power station. The small town of Hadera is situated 2 miles SE of the terminal.

Pilotage.—Pilotage is compulsory. Pilots may be contacted by VHF and board about 1 mile N of the head of the jetty.

Anchorage.—Vessels waiting for a berth may anchor in depths of 25 to 30m, about 1.5 miles NNW of the head of the jetty.

Caution.—During the winter, vessels may be unable to berth due to the exposed nature of the jetty.

Several prohibited areas front the shore to the S of the terminal and may best be seen on the chart.

Atlit (32°42'N., 34°56'E.), an ancient port, stands on a rocky promontory with a small bay at its S side. Extensive ruins, dating from the time of the crusaders, cover this area and include a square tower which is conspicuous from seaward. Atlit village is situated 1 mile S of this tower.

Cape Carmel (Har Karmel) (32°50'N., 34°58'E.) is the NW extremity of the headland which forms the W side of the approach to Hefa (Haifa). A main light is shown from a conspicuous structure, 20m high, standing on the cape. A radiobeacon is situated at the light.

A monastery, with a conspicuous red dome and a belfry, stands close SE of the light.

Reefs, with depths of less than 5m, extend up to 1.3 miles NW and N of the cape and are marked by a lighted buoy. In moderate weather, the sea breaks heavily on these reefs.

Tell es Semak, a remarkable hill, standing 0.5 mile SW of the cape and Har Karmel (Mount Carmel), standing 6 miles SE of the cape, are both excellent marks from seaward. The coast in this vicinity is usually visible from a great distance, but at times it may be obscured by early morning haze.

Other conspicuous objects in the vicinity of the cape include a hospital situated 0.9 mile ENE of the main light; a grain silo situated 1.4 miles ESE of the main light; Bahai Tomb, with a golden cupola, situated 1.2 miles SE of the main light; a hotel standing on Har Karmel ridge 0.3 mile SSW of the tomb; a tower, 90m high, standing 0.7 mile S of the hotel; and a water tower standing in the settlement of Qiryat Hayyim, 5.5 miles E of the main light.

Several prominent chimneys stand at a power station 3 miles ESE of the main light.

Caution.—An anchoring and fishing prohibited area, which may best be seen on the chart, lies 5.5 miles SW of Cape Carmel.

Several prohibited areas lie in the vicinity of the cape and may best be seen on the chart.

Mifraz Haifa (Bay of Acre)

3.6 Mifraz Haifa (32°50'N., 35°01'E.) is entered between Cape Carmel and the town of Akko, situated 6.5 miles NE. The E side of this bay is backed by low sand hills, 5 to 12m high. Tel Afeq, a hill, stands 5 miles SSE of Akko. It is 38m high and prominent from seaward.

Akko (Acre) (32°55'N., 35°04'E.), an ancient town, stands on a small peninsula and is surrounded by old fortifications. A light is shown from a structure, 10m high, standing at the SW side of these fortifications. A prominent minaret, 49m high with a green top, stands 0.3 mile NNE of the light and a prominent clock tower is situated in the SW part of the town. A small craft harbor lies close E of the town and is protected by a breakwater. Manara Rock, 7m high, lies 0.3 mile E of the light.

Vernon Reefs, with a least depth of 6m, and Talbot Reefs, with a least depth of 8m, lie centered 1.1 miles WNW and 1.6 miles SW, respectively of Akko. Akko Ledge, with depths of 4.9 to 8.8m, extends up to 1.2 miles SSW of Akko. Foxhound

Reefs, with a least depth of 8.2m, lies centered 1.4 miles SSW of the S end of Akko Ledge.

An offshore chemical berth lies 1.1 miles S of Akko and is connected to the shore by a pipeline. Pilotage is compulsory and is provided from Haifa. Anchoring and fishing are prohibited in the vicinity of this terminal.

Caution.—A prohibited area, which may best be seen on the chart, fronts the E side of the bay and extends up to 0.5 mile offshore.

Haifa (Hefa) (32°49'N., 35°00'E.)

World Port Index No. 45080

3.7 Haifa (Hefa), the principal port of Israel, lies along SW side of Mifraz Haifa. It consists of an offshore oil terminal, Qishon Harbor, and Main Harbor which is protected from the N by an extensive breakwater.

Winds—Weather.—Calm weather prevails for the greater part of the year, but during the winter, occasional SW gales make entry dangerous for vessels in ballast. Visibility may be affected in spring and autumn by low stratus clouds and fog which occur intermittently during early morning, but disperse rapidly after sunrise.

Throughout the year, the sea breeze begins at about 1000, attains considerable force between 1300 and 1400, and disperses rapidly after 1600. During the strength of the breeze, sea conditions make lightering difficult.

Tides—Currents.—The tidal rises are almost negligible, being only 0.6m at springs.

Depths—Limitations.—A recommended route channel, 4 miles wide, leads 50 miles ESE to the port. The entrance channel is 183m wide between the breakwaters and has a depth of 13.8m.

The main port has a total of 12 quays and a number of auxiliary piers. Quays 1-4 have a total length of 497m and alongside depths of 4.6 to 10m for handling general cargo.

Quays 5 and 6 have a combined length of 259m with alongside depths of 10 to 11.5m for passenger vessels and general cargo.

Quay 7 has a length of 158m and an alongside depth of 11.5m for general and bulk cargo vessels.

Quays 8 and 9 have a total length of 232m and an alongside depth of 13.8m for grain cargo.

Quays 10 and 11 are located at the W container terminal (West Quay) and have a length of 396m and depths of 8.5 to 10.5m. There is a ro-ro berth at West Quay.

Quay 12 has a length of 224m and an alongside depth of 8m for ro-ro vessels and ferry traffic.

The East Quay is 650m long and has alongside depths of 12 to 13.5m for container and bulk vessels.

The Kishon Zone extends E of the main port and is enclosed by breakwaters. The approach channel to the zone is 0.5 mile in length, with a width of 80m and a depth of 12m.

The Kishon Zone contains docks and facilities for chemical and general cargo, a fishery dock, and a marina. Quays 1-4 have a total length of 625m with an alongside depth of 10m for the handling of general cargo. The North and South Chemical Terminals have a combined docking length of 400m with alongside depths of up to 9m.

Shipbuilding and ship repair facilities are available at two floating dockyard quays with depths of up to 11.5m

An offshore tanker berth, consisting of several mooring buoys, lies in depths of 14 to 15.5m about 1.5 miles NNE of the head of the main breakwater. Tankers with a maximum draft of 12m can be accommodated.

Aspect.—Prominent landmarks in the approaches are described with Cape Carmel. A new and very conspicuous high building is reported to stand in the vicinity of the hospital, 0.9 mile ENE of the main light.

Pilotage.—Pilotage is compulsory. Pilots can be contacted by VHF and board between 0.5 and 1.5 miles N of the head of the main breakwater. Pilots are also provided for the offshore chemical berth in the NE part of the bay. See General Remarks at the beginning of this sector.

Anchorage.—A designated tanker anchorage area, which may best be seen on the chart, lies centered 2 miles NW of the head of the main breakwater.

During summer, vessels can anchor off the port in any convenient depth and clear of the prohibited areas. The depths are regular, the bottom is sand, and the holding ground is good. In bad weather, the sea breaks in exposed places where the depths are less than of 5m.

Caution.—An anchoring and fishing prohibited area, which may best be seen on the chart, lies in the inner approaches to the port.

Several prohibited areas, which may best be seen on the chart, lie in the outer approaches to the port.

A wreck, with a depth of 29m, lies about 4.8 miles N of Cape Carmel and is marked by a lighted buoy.

Haifa to Sidon

3.8 Ras en Naqurah (Rosh HaNiqra) (33°06'N., 35°06'E.), located 10.5 miles N of Akko, is a prominent white headland, 79m high, which is surmounted by a tower. A conspicuous round-topped peak stands 1.7 miles E of the headland and the land rises gradually towards it.

Between Akko and Ras an Naqurah, several settlements stand near the coast. Nahariyya, a large settlement, is situated 4.5 miles S of Ras en Naqurah and contains a prominent water tower, 45m high. A conspicuous arched aqueduct stands 2.7 miles S of this settlement. Reefs, with a least depth of 4.5m, front the S part of Nahariyya and extend up to 1.2 miles offshore.

The coastal boundary between Israel and Lebanon lies in the vicinity of Ras en Naqurah.

Caution.—Prohibited areas, which may best be seen on the chart, front the coast between Akko and Ras an Naqurah.

Ar Ras al Abyad (Ras el Baiyada) (33°09'N., 35°10'E.), a cape, is formed by a bold white cliff which is surmounted by the ruins of an ancient temple. It is W termination of the Jebel Belat, a range of hills, which rises to a height of 778m about 6.5 miles ESE. A prominent table-topped hill, 371m high, stands 1.8 miles SE of the cape.

Sur (Sour) (33°16'N., 35°11'E.), formerly known as Tyr, is a small town situated on a low and flat peninsula. A main light is shown from a structure standing on the N end of this peninsula and a prominent tower is situated 0.4 mile SSE of it. A

conspicuous white building stands on a rocky mound, 40m high, 1.6 miles ESE of the light.

A chain of low islets, rocks, and shoals extends up to about 0.7 mile N of the light

A small harbor, protected by breakwaters, lies on the N side of the peninsula. It is mostly silted up and is only used by small craft. It was reported (1990) that a pier, with a depth of 5.3m alongside its head, was used by ro-ro vessels.

Large vessels may anchor in depths of 15 to 17m, sand and weed, about 1.8 miles NNE of the light and NW of the white building. Small vessels may anchor E of the chain of islets and shoals. A good berth is in depths of 7 to 11m, sand, about 0.6 mile NE of the light.

Nahr al Litani, a large river, flows into the sea 4.5 miles NNE of Sur. Two prominent bridges span this river within 0.5 mile of its entrance.

Jabal Ash Shaykh (Mount Hermon) rises 30 miles inland of the mouth of the river. Its isolated and snow-capped peak, 2,814m high, is prominent from seaward when open.

Ras Sarafand, a double headed bluff cliff, is located 6 miles NNE of Nahr al Litani and is skirted by low plains on both sides. Several villages stand on the rising hills close inland of this cliff. A light is shown from a structure standing on an islet lying 0.8 mile W of the cliff. This islet is the outermost of several dangers in this vicinity.

Between Sur (Sour) and Sayde (Sidon), the coast is fronted by several islets, reefs, and rocks which extend up to 1.5 miles seaward in places.

Sidon (Sayde) (Saide) (33°30'N., 35°21'E.)

World Port Index No. 45040

3.9 Sidon, a petroleum port, consists of four berths, which are connected to the Zahrani oil terminal by submarine pipelines, and fronts 5 miles of coastline.

Tides—Currents.—The tidal rise is negligible, being only 0.4m at springs.

Normally, no current is experienced off Sidon. However, occasional strong S sets are experienced.

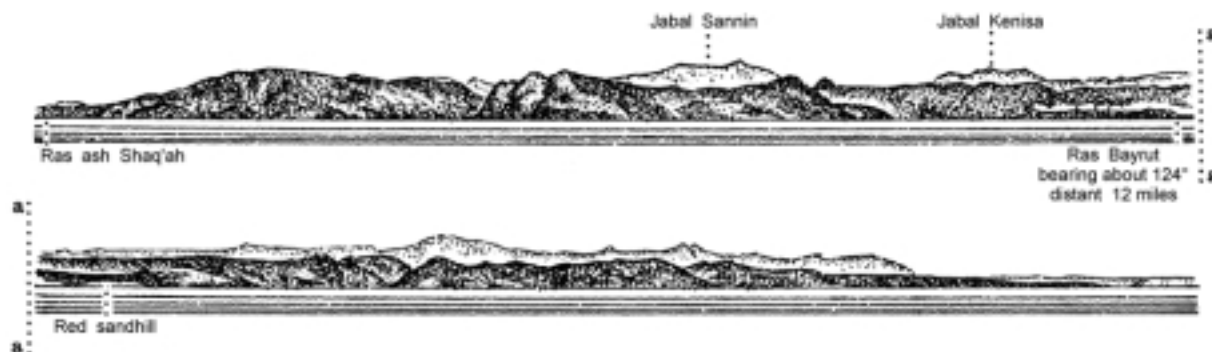
Depths—Limitations.—Berths Nos. 1, 3, and 4 have been taken out of service; the mooring buoys have been removed, but the submarine pipelines remain on the bottom.

Berth No. 2 lies in a depth of 20.4m and consists of seven mooring buoys. Tankers up to 80,000 dwt and 16.8m draft can be handled during the winter. In summer (April through October), tankers up to 100,000 dwt can be handled.

It is reported (1994) that cargo vessels up to 10,000 dwt, 130m in length, and 8m draft can anchor E of Az Zirah and be discharged by lighters.

Aspect.—Several radio towers and a tall black chimney stand near the shore in the S part of the port. The town stands on the NW slope of a rocky promontory at the N end of the port. Az Zirah, an islet, lies 0.4 mile NNW of the town. It is 6m high and is marked by a light at the S end. A small and shallow harbor fronts the N side of the town.

Pilotage.—Pilotage is compulsory. Pilots and oil company mooring masters can be contacted by VHF and generally board about 2 miles W of the berths. Vessels should send an ETA 72, 24, and 12 hours in advance. Vessels should then contact the



VIEW, IN TWO PARTS, OF THE COAST IN THE VICINITY OF BAYRUT

port 4 hours before arrival. See General Remarks at the beginning of this sector.

Anchorage.—Vessels awaiting a berth may anchor in depths of 29 to 36m, sandy bottom, about 3.2 miles SW of the town. Due to excessive depths for safe anchoring, vessels should under no circumstances anchor to the N of the above position.

Caution.—A dangerous wreck is reported to lie about 1.3 miles SW of Az Zirah.

An anchorage prohibited area, which may best be seen on the chart, lies in the vicinity of the offshore berths.

Sidon to Bayrut

3.10 Nahr al Awwali (33°35'N., 35°23'E.) flows into the sea 3 miles NNE of Sidon. A conspicuous hotel stands on the S side of the entrance to this river. Vessels may find anchorage in a depth of 16m, about 0.5 miles WNW of the river mouth.

Between the river and Ras as Sa'diyat, 6.2 miles NNE, the coast retains its rocky, steep, and barren characteristics. Part of Jabal Lubnan (Jebel Libnan), the Lebanese Mountain Range, stands inland and runs parallel to the coast. Jabal Tawmat Niha, a rounded double peak, rises 13 miles ESE of the entrance to the river and is prominent.

Ras Bayrut (33°54'N., 35°28'E.), located 13 miles NNE of Ras as Sa'diyat, is the W extremity of the promontory which forms the S side of the port of Bayrut. It is fronted by rocks and shoals. A main light is shown from a prominent structure, 27m high, standing on the point.

The red sandhills standing SE of the point are conspicuous from seaward. The coast between Ras as Sa'diyat and the point contains numerous villages and monasteries. A prominent radio mast and two aeronautical lights are situated in the vicinity of the airport, 4 miles S of Ras Bayrut.

Caution.—A submarine pipeline extends 3.5 miles WSW from a point along the shore in the vicinity of the airport.

Bayrut (33°54'N., 35°31'E.)

World Port Index No. 45030

3.11 Bayrut, a large port, lies between Ras Bayrut and Quarantine Point, 3 miles E. The main harbor is protected from the N by an extensive breakwater. An offshore petroleum berth,

which is connected to the shore by submarine pipeline, lies at the E end of the port.

Note.—The city and port facilities are still in the process of restoration and rebuilding following the damages incurred during the civil war which ended in 1991. Numerous wrecks were reported to be within the harbor. Local authorities must be contacted for current information prior to port entry.

Winds—Weather.—During the winter, strong onshore winds, sometimes accompanied by rain, set up very heavy swells in the outer part of the harbor and often generate heavy surges in the inner part of the harbor. At such times, port operations may be frequently interrupted for two or three days.

Tides—Currents.—The tidal rise is very small, being only 0.4m at springs.

A strong current usually sets to the N in the vicinity of Ras Bayrut.

Depths—Limitations.—The entrance fairway has a depth of 15.2m over a width of 320m. The harbor has four basins which provide 3,400m of main commercial berthage. There are fourteen quays, 180 to 450m long, with depths of 8 to 14m alongside. In addition, there are three mooring buoy berths within the harbor. There are facilities for bulk, passenger, general cargo, and ro-ro vessels. Vessels up to 96,800 dwt, 265m in length, and 12.9m draft have been accommodated.

The offshore oil berth, consisting of several mooring buoys, lies 0.7 mile SE of the head of the main breakwater. It is reported that tankers using this terminal are limited to a maximum draft of 10.7m.

Aspect.—Numerous minarets and prominent buildings stand in the town. A conspicuous white silo, 160m high, stands in the center of Mole 2. A lighted buoy is moored close off the head of the main breakwater.

Pilotage.—Pilotage is compulsory. Pilots can be contacted by VHF and board close NE of the head of the breakwater. Vessels should send an ETA 48 and 24 hours in advance. See General Remarks at the beginning of this sector.

Anchorage.—Vessels may find temporary anchorage as convenient to the N of the main breakwater, but clear of the harbor entrance and the prohibited anchorage area. Vessels should not attempt to anchor to the W of the prohibited anchorage area, as the depths are excessive. The greater part of the roadstead is rocky and is covered by sand or mud.

Caution.—Due to the existence of submarine cables, a prohibited anchoring area, which may best be seen on the



Courtesy of Holiday Suites Hotel and Resort

JOUNIEH

chart, extends up to 1.5 miles N from a point on the shore close W of the root of the main breakwater.

Vessels approaching the port from the S should give Ras Bayrut a very wide berth in order to avoid the rocky coastal ledge.

Several wrecks, some dangerous, lie in the approaches to the port and may best be seen on the chart.

Navigation aids in the vicinity of the port may be missing or extinguished.

Bayrut to Tarabulus

3.12 Jun Mar Jurjus (Baie Saint Georges) (33°55'N., 35°34'E.), fronted by a sandy shore, lies between the E end of the port of Bayrut and Ras el Kelb, 3.7 miles NNE. Numerous prominent buildings stand inland along the shore of this bay.

Nahr El Kelb, a large river, enters the sea close N of Ras el Kelb. Several conspicuous monasteries stand 1 mile inland to the N of the river mouth. During the summer, anchorage can be taken in depths of 12 to 16m, mud and sand, NW of the river entrance.

Jounieh (33°59'N., 35°37'E.), a small port, lies on the S side of Baie de Juniyah (Baie de Djounie) and is protected by breakwaters. The bay has considerable depths in its N and central parts. A conspicuous statue of Notre Dame de Liban stands at the base of a hill on the S shore of the bay. Two prominent monasteries are situated on a precipitous spur of a mountain at the NE side of the bay.

The harbor has 640m of total berthage, with depths up to 4m alongside, and is used by small craft, yachts, and coasters. Vessels up to 60m in length and 3.7m draft can be

accommodated. Anchorage can be taken by larger vessels in a depth of 14m, sand, about 0.5 mile NNE of the harbor entrance. The port can be contacted by VHF and local pilots are available.

Zouk, a small harbor, fronts the coast 1 mile S of Juniyah. It is used by small tankers and LNG carriers which serve a local power station.

Nahr Ibrahim flows into the sea 4.8 miles N of Juniyah. This river is spanned by a prominent bridge 2.5 miles inland. A light (Tabarja) is shown from a framework tower standing 1.8 miles SSW of the river mouth. A conspicuous tower stands in the village of Jubayl (Jebail), 3.5 miles N of the river mouth. A light is shown from Ras Aamchite (Ras Amshit), 2 miles NNE of Jubayl.

Ras Selata, a steep-to point, is located 9.5 miles N of Jubayl and is surmounted by a prominent tower.

Selaata (34°16'N., 35°39'E.), a small port, lies in the vicinity of the point and is protected by a breakwater. The harbor can be contacted by VHF and a local pilot is available and will board about 0.5 mile N of the entrance. The harbor has one main commercial quay, with a depth of 14m alongside, which can accommodate vessels up to 70,000 dwt, 230m in length, and 13m draft.

Ras Shikka (Cape Madona) (34°19'N., 35°41'E.), located 2.3 miles NE of Ras Selata, is the W termination of a tableland, 233m high. The cape is surmounted by a chapel on its NW edge and the sides are precipitous and wooded.

Al Huri, a small and open bay, is entered between Ras Shikka and Ras an Natur, 4.5 miles NE. A conspicuous large square building stands on the latter point and is a good landmark from seaward.

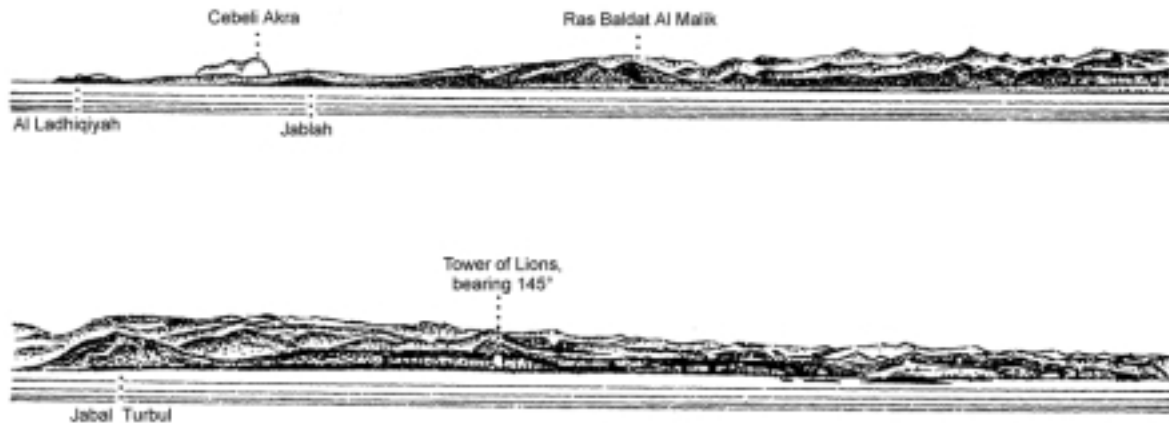
A conspicuous chimney, illuminated at night, stands in the village of Shikka Atiqah which is situated about midway between the entrance points. By day, a dense cloud of white smoke rises from this chimney and is visible for a considerable distance offshore. A light is shown from a structure standing on the coast in the SW part of the village. A jetty, 40m long, fronts the shore close N of the light. Vessels with drafts up to 8.1m can berth at the head of this jetty with the use of mooring buoys. Anchorage can be taken in a depth of 16m, sand, in the S part of the bay.

The village of Anfah (Enfe) is situated in the N part of the bay and is marked by a light. A ridge of rocks fronts the village and extends up to 1 mile seaward.

Al Mina (34°27'N., 35°48'E.), formed by a low promontory, is located 6 miles NE of Ras an Natur at the W side of Tarabulus. The coast between is fronted by rocks and shoals which extend up to about 1 mile, in places, from the shore. A conspicuous convent stands on a hill, 4.2 miles SSW of Al Mina.

Jazirat Ramkin (34°30'N., 35°45'E.) is the outermost of a chain of islets, rocks, and shoals which extends up to 3.8 miles NW of Al Mina. A main light is shown from a structure, 5m high, standing at the W side of this islet.

Sanani Channel, with a depth of 11m, leads through this chain of dangers 2 miles NW of Al Mina. This passage has a fairway 0.3 mile wide, is unmarked, and is only used by small vessels with local knowledge.



TARABULUS (TRIPOLI) FROM NW



Courtesy of Tripoli-city.org

PORTS OF TARABULUS (TRIPOLI) AND AL MINA

Tarabulus (Tripoli) (34°27'N., 35°50'E.)

World Port Index No. 45025

3.13 Tarabulus (Tripoli), a large city, extends E of Al Mina and contains numerous high-rise buildings. The port complex fronts the N shore of the city and consists of a harbor basin, protected by a breakwaters at the W end, and an offshore tanker terminal at the E end. Deep-draft vessels frequently transfer cargoes to lighters in the roadstead close N of the harbor basin.

Winds—Weather.—Port operations in the roadstead are usually suspended for up to 20 days from December through March as a result of N gales. During the rainy season (January and February), periods of intermittent rain may last up to 11 days.

Tides—Currents.—The tidal rise is very small, being only 0.6m at springs.

Tidal currents are weak and variable and are often hidden by surface currents generated by the wind.

Depths—Limitations.—The entrance fairway is about 150m wide and has a dredged depth of 9m. A pier, 600m long, has two berths on its W side with depths of 8 to 10m alongside. Vessels up to 150m in length and 6.8m draft can be accommodated alongside.

The oil terminal has five offshore loading berths which lie in depths of 11.6 to 20.1m. The berths consist of several mooring buoys and are connected to the shore by submarine pipelines. Berth No. 5 can handle tankers up to 35,000 dwt with a maximum draft of 7.5m draft; Berth No. 4 can handle tankers up to 25,000 dwt and 9.7m draft; Berth No. 3 can handle tankers up to 87,000 dwt and 14.3m draft; Berth No. 1 can handle tankers up to 140,000 dwt and 17m draft; and Berth No. 2 can handle tankers up to 250,000 dwt and 18.3m draft.

Aspect.—Jabal Turbul, a round-topped peak, stands 6 miles E of Al Mina. It is 681m high and is an excellent landmark in clear weather.

The Tower of Lions, 21m high, stands near the root of the E breakwater. This tower is conspicuous and it is sometimes marked by a light. A prominent silo stands on the E breakwater. A radio tower, 74m high, stands 0.3 mile WSW of The Tower of Lions. The ruins of Chateau de Ramond, a large castle, are situated on a hill, 60m high, in the S part of the city. Several flares, two radio towers, a signal station, and a large group of oil storage tanks are situated along the coast in the vicinity of the oil terminal.

A lighted buoy is moored about 3.2 miles NE of the head of the W breakwater and marks the approach to the offshore berths.

Pilotage.—Pilotage is compulsory. Pilots can be contacted by VHF and board about 2 miles NE of the head of the W breakwater. Vessels should send an ETA at least 48 hours in advance through Tarabulus (Tripoli) (ODC8), and a confirmation 1 hour before arrival. See General Remarks at the beginning of this sector.

Anchorage.—Anchorage is provided N of the harbor area. The S part of the roadstead, with depths of 11 to 14m, lies about 0.9 miles NNW of the outer head of the W breakwater. The N part of the roadstead, with depths of 14 to 35m, is used

by tankers. In NE gales, anchorage can be taken in depths of 14 to 20m, sand, SW of Al Mina.

Caution.—When approaching the roadstead from the S, vessels should give the W side of Jazirat Ramkin a wide berth when rounding the islet.

A restricted area, which may best be seen on the chart, lies the vicinity of the offshore oil berths.

Several wrecks, some dangerous, lie in the approaches to the port complex and may best be seen on the chart.

Tarabulus to Tartus

3.14 Qal' at Hakmun (34°30'N., 35°56'E.), consisting of two mounds covered with ruins, is located close N of the mouth of An Nahr al Barid, 7 miles NE of the harbor basin at Tarabulus. El Kulat (Al Qulayat), a large and conspicuous ruined fort, stands on the summit of a mound 5.5 miles NE of Qal' at Hakmun. An airport is situated close NW of this ruined fort. A conspicuous factory stands on the coast 3.5 miles SSW of this ruined fort.

Nahr al Kebir flows into the sea 4 miles NNW of El Kulat. Ash Shaykh Jabir, a prominent tomb, is situated on the N side of the river entrance.

The coastal boundary between Lebanon and Syria lies in the vicinity of this river mouth.

Jazirat Arwad (Ruad Island) (34°51'N., 35°51'E.), reddish in color, lies 1.5 miles offshore, 14.6 miles NNW of Nahr al Kebir. The coast between is fronted by rocks and shoals, which lie up to 2 miles offshore, and should be given a wide berth.

The island is 24m high and fine quality sponges are found in its vicinity. A large ruined fort, with a minaret on its NE corner, is situated near the middle of the island. A main light is shown from a structure, 4m high, standing on this fort.

Anchorage can be taken in depths of 9 to 11m, sand and mud, good holding ground, off the NE side of the island.

A conspicuous pillar stands on the coast at Amrit, 2.9 miles ESE of the island. A beacon stands near the shore close W of this pillar. The pillar and beacon form a range which indicates a passage through the coastal reefs.

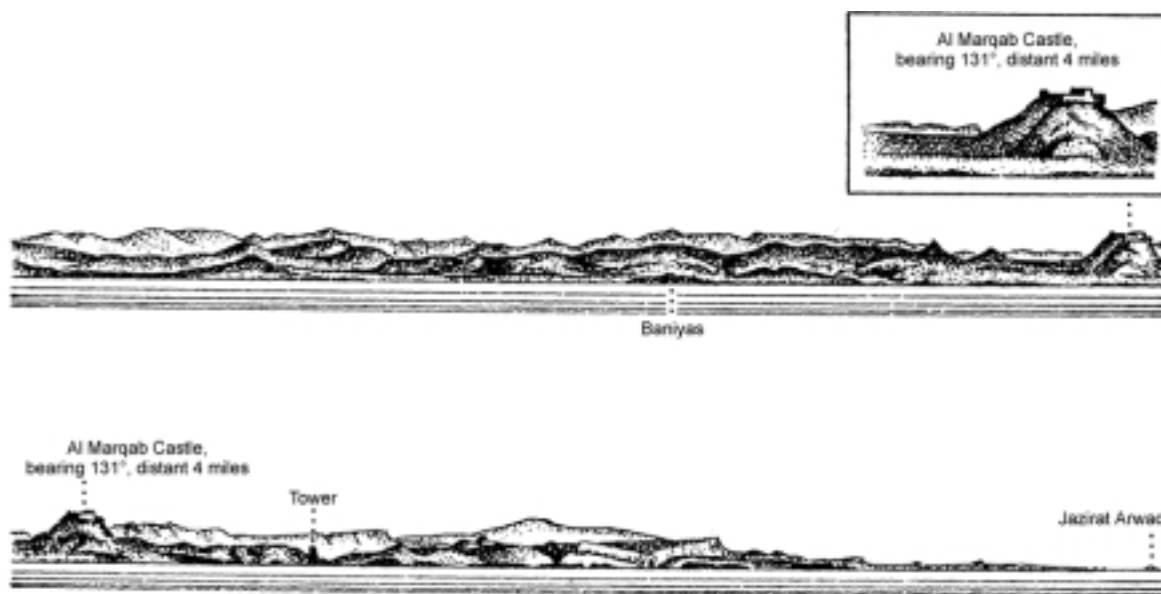
Tartus (34°54'N., 35°52'E.)

World Port Index No. 45003

3.15 Tartus, a small town, stands on the coast 2.5 miles NE of Jazirat Arwad. The port is primarily used for the transshipment of cargo and was designed to relieve the congestion at Al Ladhqiyyah. It is also a naval base and a tourist center. The harbor fronts the N part of the town and is protected by extensive breakwaters.

Depths—Limitations.—The main harbor consists of four basins which provide 22 commercial berths. There is 6,000m of total quayage with depths of 4 to 14m alongside. There are facilities for ro-ro, container, and bulk vessels. Vessels up to 65,000 dwt and 13m draft can be accommodated.

The oil terminal has two offshore berths which consist of several mooring buoys and are connected to the shore by submarine pipelines. Berth No. 1 lies in a depth of 23.2m and Berth No. 2 lies in a depth of 21.9m. Tankers up to 100,000 dwt, 280m in length, and 20.5m draft can be handled.



THE COAST OF SYRIA BETWEEN AL MARQAB CASTLE AND JAZIRAT ARWAD

Aspect.—Two prominent minarets and the ruins of a cathedral stand in the town 0.3 mile S of the root of the S breakwater. The observatory building stands 0.3 mile NNE of the root of the S breakwater and is prominent from seaward. A conspicuous silo stands in the S part of the harbor. An outer approach lighted buoy is moored about 0.5 mile NW of the head of the S breakwater and the entrance fairway is marked by buoys.

Several prominent chimneys stand at the oil refinery 3.7 miles NNE of the main harbor.

Jazirat an Maml (Ipsiri Islet) lies about 0.5 mile offshore, 4 miles N of the main harbor.

Pilotage.—Pilotage is compulsory. Pilots can be contacted by VHF and board about 0.5 mile W of the SW breakwater, or 2 miles W of the offshore berths. Vessels should send an ETA 72 and 24 hours in advance and then contact the pilot station 2 hours before arrival. An approach channel, 2 miles wide, leads E to the port and may best be seen on the chart. See General Remarks at the beginning of this sector.

Anchorage.—Vessels can anchor in depths of 14 to 20m, rocky bottom, good holding ground, between 0.3 and 0.7 mile W of the head of the S breakwater.

Caution.—Several wrecks, some dangerous, lie the approaches to the port and may best be seen on the chart.

An anchoring prohibited area lies in the vicinity of the offshore berths and may best be seen on the chart.

Baniyas (35°11'N., 35°57'E.)

World Port Index No. 45005

3.16 Baniyas, an oil terminal port, fronts the coast 17 miles N of Tartus. It consists of six offshore berths which are connected to the shore by submarine pipelines.

Depths—Limitations.—The terminal berths consist of several mooring buoys. Berth No. 2 can handle tankers up to 275m in length and 15.5m draft; Berth No. 3 can handle tankers up to 290m in length and 15.8m draft; Berth No. 4 can handle tankers up to 229m in length and 12.8m draft; Berth No. 5 can handle tankers up to 213m in length and 10.4m draft; and Berth No. 6 can handle tankers up to 213m in length and 9.8m draft.

Berth No. 7 is used by LPG and jet fuel carriers and can handle vessels up to 213m in length and 8m draft.

Aspect.—Ras al Burj is located 2 miles S of Baniyas. A main light is shown from a structure, 11m high, standing near this point. Al Marqab Castle, a conspicuous fortress, surmounts a hill 1.5 miles ENE of the light.

A prominent power station with two tall chimneys is situated on Ras al Marj, 1.5 miles N of Ras al Burj.

A prominent minaret stands on the NW side of the town, and a conspicuous military camp is situated on the N side of the town.

A prominent tank farm backs the oil terminal and a radiobeacon is situated in its vicinity. A conspicuous signal station stands on the shore in the N part of the terminal.

An outer lighted buoy is moored about 2 miles NW of the town and SSW of the offshore berths.

Pilotage.—Pilotage is compulsory. Pilots and mooring masters can be contacted by VHF and board about 1.5 miles W of the offshore berths. Vessels must send an ETA to Baniyas (YKM5) 72, 48, and 24 hours in advance. An approach channel, 3 miles wide, leads E to the port and may best be seen on the chart. See General Remarks at the beginning of this sector.

Anchorage.—Vessels awaiting a berth are recommended to anchor in depths of 14 to 18m, about 1.7 miles NW of the town and S of the offshore berths. The bottom is rock, coral, and sand.

Caution.—Due to excessive depths, vessels are not recommended to anchor seaward of the offshore berths.

Baniyas to Al Ladhikiyah

3.17 Ras Baldat al Malik (35°16'N., 35°55'E.) is located at the S side of the entrance to Nahr Sinn, close N of the oil terminal at Baniyas. A group of rocks and shoals extends up to 0.8 mile seaward in this vicinity and is marked by a lighted buoy.

Jablah (35°22'N., 35°55'E.), a town surrounded by gardens, is situated 6 miles N of Ras Baldat al Malik and is fronted by a small craft harbor. A prominent mosque, with three domes and a minaret, stands on the N side of this town.

Tall Sukas, a hill, stands on the coast 3.2 miles S of the town. It is 40m high and conspicuous from seaward.

Ras Ziyarah (35°31'N., 35°46'E.), a rocky promontory, forms the S side of the approach to Al Ladhikiyah. A light is shown from a structure standing on the S extremity of this promontory. A prominent stranded wreck is reported (1983) to lie about 0.2 mile SW of the light.

Al Ladhikiyah (Latakia) (35°32'N., 35°47'E.)

World Port Index No. 45010

3.18 Al Ladhikiyah is situated on the Ras Ziyarah promontory. The harbor fronts the N side of the town and is protected from the W by a breakwater.

Winds—Weather.—The prevailing winds are from the SW, but gales from the NE have been experienced with winds attaining speeds of 55 knots at times. During winter storms (November through March), heavy seas and rain are frequent and may last for 2 or 3 days. At such times, the port may become inaccessible and cargo operations at the roadstead are halted.

Tides—Currents.—The tidal rise is small, being only 0.6m at springs.

Currents at the harbor entrance are reported to be weak.

Depths—Limitations.—The main commercial facilities in the inner part of the harbor include Khahaleh Quay, 600m long, with a depth of 9.5m alongside; Silo Quay, 185m long, with a depth of 8.5m alongside; and Passenger Quay, 260m long, with depths of 7 to 9.5m alongside. In addition, there is also 700m of berthage with depths of 2.5 to 7m alongside.

The new facilities at the outer part of the harbor include 2,150m of total quayage with depth of 7 to 13.3m alongside. Vessels up to 123,400 dwt, 260m in length, and 13m draft can be accommodated.

An offshore oil berth, consisting of several mooring buoys, is situated in the outer part of the harbor. It lies in a depth of 12.2m and is connected to the shore by a submarine pipeline.

Aspect.—A large and prominent tank farm is situated at the N end of the town. A prominent cathedral, with two belfries,

stands 0.8 miles NE of the root of the breakwater. A conspicuous silo, 65m high, stands in the vicinity of the root of the breakwater.

A main light is reported (1994) to be shown from a structure standing in the SE part of the harbor, 0.5 mile NNE of the root of the breakwater.

Pilotage.—Pilotage is compulsory for vessels over 1,000 tons and for all vessels during inclement weather. Pilots and mooring masters can be contacted by VHF and board about 1.5 miles WSW of the head of the breakwater.

An approach route channel, 2 miles wide, leads E to the port and may best be seen on the chart. See General Remarks at the beginning of this sector.

Anchorage.—A designated Anchoring/Waiting Area, with depths of 18 to 22m, is best seen on the chart.

Caution.—Dangerous wrecks lie about 1.4 miles W and 1.6 miles WSW of the head of the breakwater.

Al Ladhikiyah to Ras Al Basit

3.19 Ras Ibn Hani (35°35'N., 35°43'E.), the NW extremity of a low peninsula, is surmounted by the remains of a temple. When viewed from a distance to the S, this peninsula appears as a chain of rocky islets. A main light is shown from a prominent structure standing on the point.

Several small and shallow bays lie in the vicinity of the peninsula and are obstructed by reefs.

Minet El Beida (35°37'N., 35°46'E.), a small harbor, lies on the SW side of a bay and is protected by a breakwater. It provides 475m of berthage with depths of less than 5.5m alongside.

Ras al Fasuri (35°40'N., 35°46'E.), a conspicuous promontory, consists of steep-to bold cliffs. A light is shown from a structure standing on the point. Considerable deep depths lie close off this point.

Borj Islam Terminal (35°41'N., 35°47'E.), an LPG loading berth, lies close NE of Ras al Fasuri. A conspicuous cement factory, with a prominent chimney, stands near the terminal. LPG carriers and tankers, up to 5,000 tons, berth close inshore with anchors down ahead and their sterns secured by lines to the shore. Local pilots are provided from Al Ladhikiyah.

Ras al Basit (35°52'N., 35°48'E.), a projecting low headland, is surmounted by a flat-topped limestone hill, 50m high. A main light is shown from a tower, 12m high, standing on the point.

A prominent point, surmounted by the ruins of a tower, is located 1 mile S of the light.

The coastal boundary between Syria and Turkey lies in the vicinity of Kassab Bay, about 7 miles NE of Ras al Basit.